

# Product showcase

## Arbitrary waveform generator

The Model 3165, two-channel arbitrary waveform generator from **Racal Instruments** includes two independent analog outputs that can be either single-ended or differential, sample rates up to 100 MS/s, a high dynamic range with 14-bit resolution, and external or internal triggering. Other features include internal or external clock sourcing, output signal filtering, programmable dc offset voltage, and variable output levels. Model 3165 can be used for various military communications, and industrial electronics applications.

*For more information, circle 100*



## Imaging colorimeter

**Radiant Imaging's** ProMetric 1000 Color is a charge-coupled-diode-based imaging colorimeter that delivers 10-bit (1024 gray scale) dynamic range measurements of luminance, illuminance, and chromaticity, and uses ProMetric 8.0 software to enable a range of sophisticated image-analysis tasks. Applications include production-line testing of brightness and color uniformity of LCDs, OLEDs (organic light-emitting diodes), instrument panels, and backlight components. It is also a tool for color Mura defect inspection in these same applications.

*For more information, circle 101*



## Real-time operating system

RedHawk Linux Version 2.1 from **Concurrent** is a real-time version of the open-source Linux operating system (based on the 2.6.3 Linux kernel). The version adds support for 32-bit **Intel** Xeon and 64-bit **AMD** Opteron platforms. The system delivers high I/O throughput, guaranteed fast response to external events (less than 30 ms on a shielded processor), and optimized interprocess communication. The system on 32-bit Xeon-based iHawks supports features such as user-level control of Hyper-Threading, allowing each physical CPU to be divided into two logical CPUs for more efficient processing. On 64-bit Opteron iHawks, users can run existing off-the-shelf 32-bit applications, recompile 32-bit RedHawk applications into 64-bit mode for improved performance and extended addressing, and develop new 64-bit applications on the same platform. The system is field-proven in mission-critical programs including the **Eurofighter** training device, F/A-18 and EA-6B simulation systems, and the Theater High Altitude Area Defense missile program.

*For more information, circle 102*



## Hardness tester

**Usion L.P.'s** InSite-HT multi-channel component hardness tester, part of the Zetec series of eddy-current testers, effectively verifies hardness of metal parts and detects flaws such as cracks or defective threads. They are configurable for in-line testing of a variety of metal components such as gears, axles, bearings and castings, engine subassemblies, pistons, fuel systems, wheel hubs, and brake parts. Features include built-in language selection, network adapter, and automatic voltage switching. The system can communicate with material-handling systems and programmable logic controllers. It is offered in two, three, and eight coil versions.

*For more information, circle 103*



## Dynamic force sensors

Piezoelectric force sensors from the Force/Torque Division of **PCB Piezotronics** measure dynamic force in compression, tension, and impact modes. They have the necessary response and endurance to follow fast-rising, short-duration force events such as crimping, stamping, punching, forming, and drop and impact testing. Sensor types offered include ring, three-component ring, link, impact, penetration, and strain styles. ICP and charge output versions are available; signal conditioning is also offered. Applications include tensile and fatigue testing, press force and machine process monitoring, package drop testing, force-limited vibration testing, penetration testing, and modal analysis.

*For more information, circle 104*



## Universal tester

The EZ Graph Bench-Top Universal Tester from **Shimadzu Scientific Instruments** is engineered for high-precision, high-speed testing of electronic components and components produced from ceramics or highly rigid materials. Available from 4 mN to 10 kN, the tester features sampling speeds from 1.25 to 5.0 ms intervals, which enable accurate measurement of test force effects in the elastic or break regions. A Smart Controller allows fine specimen positioning adjustments and aids operation of the crosshead and automatic extensometer.

*For more information, circle 105*

